

Development of Assurance Factors

The assurance factor accounts for the average risk of reversal across all afforestation projects within a given region. Technical experts and the materials listed in the bibliography were consulted to assess both the range of values and to explore the relationships across regions, tree species and risk types. There were significant gaps in the availability of conclusive and specifically relevant scientific and insurance data to establish definitive assurance factor.

Based on an analysis of the available data, the range of data available provided a reasonable basis for concluding that over a creditable life of an afforestation project, considering cross-subsidy effects across regions and species, that a reasonable assurance factor would be greater than 90%. As the effects of many of these events would be captured in the assessment of above ground biomass accumulation over a given period, this appears to be a reasonable factor. However, there was not sufficient data to support refining this estimate above this level at this time, and as such, a 90% assurance factor was deemed reasonable.

Further research would be useful in supporting this assessment of an assurance factor and in refining the values by ecozone and tree species.

Primary Source Materials

W.J.A. Volney, R.I. Alfaro, P. Bothwell, E.H. Hogg, A. Hopkin, G. Laflamme, J.E. Hurley, G. Warren, J. Metsaranta and K.I. Mallett. 2005. A framework for poplar plantation risk assessments. Unasylva. No. 221. Vol. 56.

International Risk Management Group Ltd. 2005. RFP 05-0906: Report – Tasks 1-4. Natural Resources Canada

International Risk Management Group Ltd. 2005. RFP 05-0906: Report – Tasks 5-9. Natural Resources Canada